



# King Rail

*Rallus elegans*



**CURRENT STATUS:** In Pennsylvania, the king rail is listed as endangered and protected under the Game and Wildlife Code. Although not listed as endangered or threatened at the federal level, the king rail is listed as a species of high concern in the North American Waterbird Conservation Plan. All migratory birds are protected under the Migratory Bird Treaty Act of 1918.

**POPULATION TREND:** The king rail (*Rallus elegans*) has always been scarce in Pennsylvania. Confirmed breeding/nesting has been restricted to few locations in the state since the 1980s. A marshy field along Route 15 south of Lawrenceville in Tioga County, and State Game Lands 284 in Mercer County have been important breeding sites for this species. Until the early 1990s, one or two pairs nested in Philadelphia County's Tinicum marshes, and nesting has been irregular at Crawford County's Conneaut Marsh. It is possible this bird no longer occurs regularly at any single location in the state, but little is known of its habits in Pennsylvania. No confirmed breeding observations were reported during the 2nd Breeding Bird Atlas, 2004-2008, but there were more reports during this project than in recent years. Some reports suggest that there were active nesting pairs, but confirmation was lacking. A volunteer-assisted marsh bird survey launched in 2013 may help to answer many questions. The king rail was designated a state endangered species in 1985 and remains endangered today.



**IDENTIFYING CHARACTERISTICS:** The king rail is so named because of its large size and bright coloration. This plump chicken-sized bird weighs almost a pound and is a bright rusty color. They range from 15 to 19 inches in height and have 21- to 25-inch wingspans. The king rail is more than twice the size of the similar, and more common, Virginia rail (*Rallus limicola*). Males are larger than females. Bills are long, slightly decurved, and yellow with brown tips. These birds are extremely secretive and would rather run than fly to escape detection. They are rarely seen, therefore, and are most often located by their loud calls, a resonant grunting *bup-bup, bup, bup, bup*, more rapid at the end.

**BIOLOGY-NATURAL HISTORY:** This large rail prefers large wetlands with cattails, grasses, sedges and rushes in shallow standing water, but also may live in marshy fields and other wet areas. King rail



nests are platforms up to nine inches in diameter, six to 18 inches above the water. They are built of grasses, sedges and cattails in shallow-water marshes and roadside ditches. From six to 15 pale, slightly spotted brown eggs are laid in a shallow depression of the nest. Overhead cover is often pulled over the nest. Young leave the nest shortly after hatching and are able to fly at about 60 days. Wading in shallow water, king rails feed on crustaceans, small fish, frogs and insects. In winter, food items consist of grains – particularly rice – and berries.

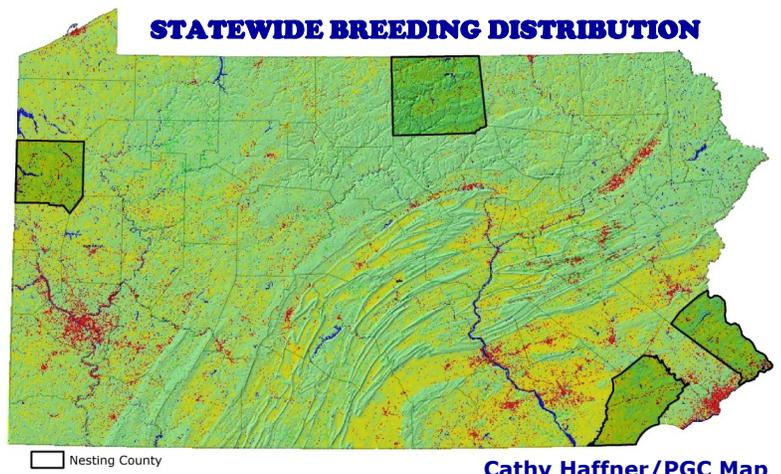
**PREFERRED HABITAT:** This rail lives in freshwater and brackish marshes, marshy fields and roadside ditches in eastern North America, primarily along the Atlantic coast. It is a very rare breeder in the few larger marshes remaining in Pennsylvania.

**REASONS FOR BEING ENDANGERED:** King rails were never common in Pennsylvania, but Game Commission annual reports indicate the bird today is even more rare than it was historically. This apparent decline is believed to have been caused primarily from losses in the quality and quantity of marshland habitat. More than half of the wetlands that occurred before settlement have been lost in Pennsylvania, having been drained and converted to other uses, such as agriculture and residential developments. More than other rails, king rails seem to need large and unfragmented wetlands, an increasingly rare commodity in the state. For nesting, this species needs emergent vegetation over standing water. They seem particularly vulnerable to collisions with fences, telephone lines and automobiles.

**MANAGEMENT PROGRAMS:** As with many other endangered and threatened species, the king rail needs wetlands to exist. More than most wetland-dependent birds, it needs large and relatively undisturbed wetland habitat. Maintaining stable water levels during the summer will enhance the species' breeding success. Also, protecting wetlands from sediment and chemical pollution will benefit king rails and other wildlife. The U.S. Fish and Wildlife Service recently completed a national King Rail Conservation Plan to help guide and standardize conservation and management efforts for this species. King rails are particularly elusive and difficult to confirm nesting. Conducting regular surveys for this rare and elusive species should be an integral part of efforts to manage for it in the state.

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